



The Ground Plane

South Bay
Amateur
Radio
Association
ARRL Member Club
Since 1974



Volume 5 Edition 11

November, 2004

Join other SBARA members at the North China Restaurant for a pre-meeting social dinner.

Time: 6:00PM - Date: November 12, 2004 - Address: 39144 Paseo Padre Pwky. (in Raley's shopping center)

President's Message by Al Rendon, WT6K

It is that time of year for all of us SBARA members to renew our 2005 membership. The leadership team has decided to send a 'one time' invoice to every current member with the goal of reducing the cost of sending out monthly reminders and hopefully receiving the majority of renewals by the end of December. Be watching the mail for your renewal invoice. We thank you in advance for renewing your membership in a timely manner. You can make a difference in helping us control cost.

You are invited to join other SBARA members for a pre-meeting dinner on November 12th at the North China Restaurant located in the Raley's shopping center on Paseo Padre Pwky at Mowry. We will be gathering at 6:00PM. See the announcement above the President's Message for more details.

At the November meeting we will be having elections for the 2005 leadership team. The elected positions are; President, Vice President, Secretary and Treasurer. In addition to the elected positions there are a number of appointed positions that make a difference in how successful your association operates. Please consider participating on the team. I can tell you that they are a great group of hams that have been working together to bring you quality newsletters, meeting pro-

grams, webpage, meeting raffles and fun events like Field Day. You will find it rewarding working with them. If you have enjoyed SBARA and received something from this year maybe you can give back by being part of our leadership team.

Also at the November meeting you can sign-up to attend the SBARA December Holiday Dinner. Last year's dinner was a great success. Bring your spouse or friend. It is a family social event. We changed the format after finding it difficult to find a restaurant that would accommodate our group close to the Christmas holidays. So this year we will once again try to have the dinner in a warmer environment than a restaurant. The dinner will be starting at 7:30PM on Friday, December 3rd at the Veterans Memorial Hall. For those of you who have not attended a meeting at the Veterans Hall, the hall has a full kitchen and a spacious dinning room. If we haven't seen you since Field Day please mark your calendar and plan to attend SBARA's 2004 year end function. Call Al Rendon (510-656-2427) to sign-up or if you have further questions.

This is the final 2004 issue of the Groundplane. Please join me in thanking Bill Artelt, WB9YVM for all his effort in producing this year's newsletter. Also, remember there will not be a membership meeting in December.

73, Al - WT6K

November Program—The Threat of Broadband over Power Lines

Broadband over Power Lines, or BPL, represents one of the greatest potential threats to Amateur Radio we've seen in recent times. BPL is advertised as a way to deliver internet service to everyone and there are many large companies and big money behind this technology. The result of wide deployment could be serious interference on the HF and low VHF bands to the point where they are unusable. We've just barely avoided a deployment in Menlo Park and Fremont could be next. Come hear ARRL Pacific Division Director Bob Vallio, W6RGG, tell us what's happening with our fight to stop BPL interference.

In This Issue

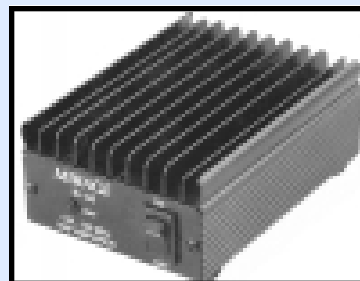
<i>President's Message</i>	1
<i>BPL Presentation</i>	1
<i>VP's News / Information</i>	2
<i>Membership Form</i>	3
<i>Meet Ted—N6BFO</i>	4
<i>October Photos</i>	7, 8
<i>Leadership Team</i>	9
<i>Important News</i>	Cover

From the VP — November

November 12th will be the last SBARA general meeting of 2004, your last chance to win big at our monthly raffle. During the 2004 meetings SBARA has given away mobile 2M radios, 2M HT's, GPS's, FRS radios, kit's, book's, antennas and other accessories to numerous to mention. In addition the club raffled off an ICOM IC-718 HF transceiver during Field Day, our largest raffle item in our history. The club will continue this tradition in November by offering 2 attractive prizes of equal value, a Mirage B-34 2M HT amplifier and a MAHA-C777PLUS-II universal Battery charger, analyzer & conditioner. The Mirage is a great little amplifier that boosts your 5W 2M HT up to 30-35 Watts output and the MAHA charger will charge and condition almost any Nickel Cadmium, Nickel Metal Hydride, Lithium Ion or Lithium Polymer battery regardless of the battery pack shape. These prizes are valued at \$80.00 each and the minimum raffle buy in is \$5.00 for 5 tickets with additional tickets at \$1.00 each. Is this a deal or what??

Check out the Mirage amplifier and look at it's manual at:

<http://www.mirageamp.com/mirageamp/products.php?prodid=B-34>



The MAHA charger specifications can be viewed at:

<http://www.mahaenergy.com/store/item.asp?idproduct=185>

The October raffle prize went to Don Gintel KG6SBE. Don walked away with the Arrow II satellite antenna and joins the SBARA winners honor roll along with Adam Feriante KG6HDR and Ernie Anaya KF6FFE, our perennial winners!



SBARA 2005 Meeting Information

SBARA's January meeting will be on January 14th, 2005
at the Veterans Memorial Hall in Niles.

SBARA Membership Form (Dues paid annually)

☐ **New Member** \$20.00 ☐ **Renewing Member** \$20.00 ☐ **Senior Member** \$10.00

☐ **Family Membership** (all at same address) \$25.00

Name: _____ Call: _____ ☐ ARRL? ☐ RACES/ARES?

Address: _____

City: _____ State: ____ Zip: _____

Phone: () _____ Email: _____

Additional Family Members (at same mailing address)

Name: _____ Call: _____ ☐ ARRL? ☐ RACES/ARES?

Name: _____ Call: _____ ☐ ARRL? ☐ RACES/ARES?

Name: _____ Call: _____ ☐ ARRL? ☐ RACES/ARES?

Name: _____ Call: _____ ☐ ARRL? ☐ RACES/ARES?

☐ SBARA Name tag with your callsign \$8.00 each ☐ SBARA T-Shirt \$20.00 XS / S / M / L / XL

Total Amount Enclosed \$ _____

Mail form and dues to: Membership Chairman, SBARA, PO Box 8337, Fremont, CA. 94537

Comments or Special Interests: _____

CLUB COMMISSIONS FOR ARRL RENEWALS ARE BACK!

We may not be able to stretch our dollar as far as it used to go, but ARRL has found a way for us to add MORE dollars to the SBARA club treasury. How? ARRL is simply going to turn back time. ARRL is very appreciative of our recruitment efforts. That's why ARRL is bringing back commissions for ARRL membership renewals in addition to the existing commission for new member sign-ups. SBARA will receive a \$15 commission for each new or lapsed (over 2 years) membership we submit, **BUT in addition, we'll receive a \$2 commission for every ARRL yearly membership renewal we send in.**

SBARA Life Member Profile: Ted Cameron – N6BFO

Ted was born in Up-State New York and he came out west during WWII. While Stationed at Fort Lewis, Washington he met his wife Madge. He took a job with the USGS in 1947 and worked for them until he retired in 1975. After retirement he and Madge traveled all over the U. S. in their motor home. Ted says he tried to communicate using CB but it didn't work. While visiting Bob Martin a USGS friend, who also happened to be a ham WD6AI A, Ted was impressed with his ability to communicate all over the Bay area on 2 Meters and when Bob called a VK in Australia on 20 Meters and the ham came back, Ted was sold on Amateur Radio.

Ted began to study for the Novice and Technician class licenses. In February 1979 he was ready so he took the trip to Battery Street in San Francisco and passed them both. Later in May he went back and passed the General. In January of the following year he passed his Advanced Class exam. To get his code speed up Ted Worked all States on CW and in 1981 he took and passed his Extra Class exam.

Ted has been a cornerstone of the first VEC and he formed Ted also was one of the founders of the SBARA Field Day that we all enjoy so much today.



SBARA for many years. He was one of and directed the SBARA VEC team. ders of the SBARA Field Day that we

I first met Ted at a SBARA that would stay overnight in up in his mint green Chevy his station and with the great working a bunch of stations.

field Day. He was the only participant those days and he would set his station pickup truck. He invited me to operate antenna he had erected I had a ball

My neighbor Joe Durbin worked for the USGS and I mentioned that I have met a ham named Ted Cameron who had been a long time employee and I wondered if Joe knew Ted. Joe instantly replied " oh yes, Ted was a big time supervisor at the USGS!"

The word that comes to mind when I think of Ted is 'Gentleman' He is a true gentleman and I hear others use that word when referring to Ted. When I think of Ted and amateur radio, Antenna comes to mind. Ted's knowledge of antennas, especially wire antennas, and his willingness to share his knowledge has been a wonderful gift to SBARA.

Ted is a 'Life Member' of SBARA and attends every meeting. So, on November 12th come to the SBARA meeting and say hello to Ted Cameron, N6BFO.

Al Rendon – WT6K

Tidbits — Mike AB6CV

Quick PSK-31 Transmit Level Adjustment

It is very important to set your audio transmit level so that your signal can be heard but not so loud that you splatter all over the band. This can be hard to do so I came up with this method that seems to work pretty well.

You will need a wattmeter monitoring your transmit power output to do this.

Bring up your audio mixer display on your computer. On your computer the microphone level adjusts your RECEIVE level. (Some people may be using aux in instead) Your speaker control adjusts your TRANSMIT level. So for our purposes we will be adjusting the speaker volume.

1. Set the computer speaker volume to its lowest level, zero.
2. In your psk-31 control software select transmit (key your rig) This will put a audio idle tone on and start transmitting
3. Watch your wattmeter and note the power level
4. Now slowly increase the computer speaker volume while watching your wattmeter. At some point the power level will not increase any higher.
5. Now decrease the volume carefully until power just starts to drop. This is the balancing point of our teeter totter. Increase the volume just a bit higher and that should do it.
6. Of course you can verify the setting by on air reports from other stations.

But you should be very close.

APRS Tracker

I recently purchased and successfully built a pockettracker by Byonics. **Overview:** This unit is both a modem and 2m radio. It is crystal controlled on 144.39 and can also do 144.40. It takes GPS NEMA data in and transmits your beacon information out on 2m. They use a PIC chip as a micro computer to run things. You must program the PIC yourself using a Windows computer and some software they provide for free from the Byonics web site. It is very easy to use software.

Building: The kit is not for beginners to kit building. The board has a lot of surface mount parts already soldered to it. You will be installing discrete components over and around these surface mount components. A bright light and a big magnifying glass are a must. Oh, and a very steady hand. My first clue that this was going to be a bit hard to build was when they called out wire jumper lengths to the thousandth of an inch. ie., Long white backside wire 2.154" long. Eeek! Another things that makes things confusing is the extra solder pads that are not used. They try to do silkscreening but the board is just too small. I did have to trace a few runs on the board to figure out where to place components. But only once or twice.

Alignment: Easy to align. Only 2 adjustments. Takes no time at all to do.

Software: Thanks to the good interface Byonics supplies it is easy to configure the Tracker. You will need a funny serial port connector. 9 pin RS-232 to a micro stereo headphone plug. But I made that.

Cabling: All cables are available from Byonics. Both for the GPS and the PC programming cable.

Overall: It is a great little unit once you get it all together. The 2 big things it has going for it are it's small size and the fact it has the transmitter built in. It is said to run for 12 hours on a single 9volt battery. I have not had time to verify that. But the software configuration setting will affect that, i.e., how often you transmit.

*** See a Photo of the APRS Tracker on Page 8 in this Issue.

Help Wanted

Immediate openings - No experience required

Amateur radio club seeks active members who are team players to man it's Executive Board and numerous chairs. Positions open include:

Recording Secretary: An elected SBARA board position that requires taking, reading back and publishing meeting minutes for the governing board.

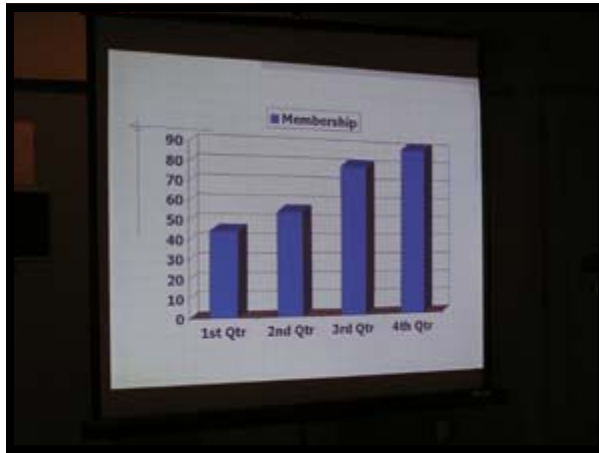
Activities Manager: Seek out and schedule technical and operating presentations for SBARA monthly meetings.

Refreshments Chair: Purchase and set up refreshments (food & drinks) for SBARA meetings.

No pay or benefits, just some recognition and the satisfaction of getting an important job done for a social & technical fraternity of amateur radio operators in the Tri-City area. Apply by contacting SBARA President Al Rendon WT6K at (510) 656-2427 or Vice President Sam Severs WS6S at (510) 791-7065.

PS: We are not army recruiters and there is no sign on bonus!!

October Photos



SBARA Members



SBARA Attendance



AI Introduces Ted



Ted—N6BFO



Lifetime SBARA Award to Ted

October Photos



Chief Cook Harry



Cook Gary



Co—Cook Collin



Raffle Winners



Al's 10Ghz Set-up



APRS Tracker—
Story on Page 5 in this Issue.

Handy Web Links

SBARA Web Site	http://www.qsl.net/sbara
ARRL Main Site	http://www.arrl.org/
ARRL SCV Division	http://www.arrl.org/sections/SCV.html
ARRL East Bay Section	http://www.pdarrrl.org/ebsec/index.html
ARRL Contest Page	http://www.arrl.org/contests
Contest Calendar	http://www.hornucopia.com/contestcal
Callsign Lookup (QRZ)	http://www.qrz.com/
Vanity Callsign Info	http://www.vanityhq.com/
I RLP Main Page	http://www.irlp.net/
AMSAT	http://www.amsat.org/
FCC Services	http://wireless.fcc.gov/services/amateur

SBARA on the Internet at
<http://www.qsl.net/sbara>

Fremont Repeaters & Net Information

WA6PWW - 147.015 +600Khz, PL 103.5
 WA6PWW - 223.900 -500Khz, PL 107.2
 WA6PWW - 442.600 +5Mhz, PL 107.2
 N6OXR - 146.94 -600Khz, PL 123.0
 N6OXR - 441.525 +5Mhz, PL 123.0
 ARES - Tuesday @ 7:30pm - 147.015 + PL 103.5

Groundplane

SBARA Newsletter

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The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is six days prior to the end of the previous month. Articles can be sent by email to hamradio@comcast.net or via U.S. Mail. Contact the Editor for details and submission guidelines. The opinions expressed in the Groundplane are strictly those of the authors.

**South Bay Amateur
Radio Association**
 Founded 1974

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Vice President

Sam Severs, WS6S
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Vacant

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ISS Ham Radio Now in Repeater Mode

The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system.

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's on AMSAT's website, http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf cational outreach program with US par- (The Amateur Satellite Radio Corp.), and League. ARISS offers an opportunity excitement of Amateur Radio by talking board the International Space Station. ties experience, first hand, how Amateur can energize youngsters' interest in sci- Further information on the ARISS pro- <http://www.rac.ca/ariss>



Thank you & 73, Scott H. Stevens, N3ASA—Frank H. Bauer, KA3HDO

Downlink/Uplink Frequencies

The ISS repeater downlink is 145.800 MHz, which is the normal FM voice and the RS0ISS packet system downlink worldwide. (The *non-repeater* FM voice uplink frequencies are 144.49 MHz in Regions 2 and 3 and 145.20 MHz in Region 1. The packet uplink frequency is 145.99 MHz worldwide.)

The ISS repeater uplink is 437.800 MHz, which is in the high end of the satellite subband. Not all dualband FM transceivers will transmit on that frequency, however. For example, a stock Icom IC-W32A will not transmit there. So, before you attempt to transmit through the ISS repeater, check your transceiver's owner's manual to make sure you will be able to transmit on the uplink frequency. No CTCSS tone is needed to access the ISS repeater.

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Ham Contest Information

Weekly Contest Information — <http://www.hornucopia.com/contestcal/weeklycont.php>

13th Month Contest Information — <http://www.hornucopia.com/contestcal/contestcal.html>

ANAHEIM, CA
(Near Disneyland)
933 N. Euclid St., 92801
(714) 533-7373
(800) 854-6046
Janet, KL7MF, Mgr.
anaheim@hamradio.com

BURBANK, CA
2416 W. Victory Bl., 91506
(818) 842-1786
(800) 854-6046
Eric, KA6IHT, Mgr.
Victory Blvd. at Buena Vista
1 mi. west I-5
burbank@hamradio.com

OAKLAND, CA
2210 Livingston St., 94606
(510) 534-5757
(800) 854-6046
Mark, W17YN, Mgr.
I-880 at 23rd Ave. ramp
oakland@hamradio.com

SAN DIEGO, CA
5375 Kearny Villa Rd., 92123
(858) 560-4900
(800) 854-6046
Tom, KM6K, Mgr.
Hwy. 163 & Claremont Mesa
sandiego@hamradio.com

SUNNYVALE, CA
510 Lawrence Exp. #102, 94085
(408) 736-9496
(800) 854-6046
Rick, N6DQ, Mgr.
So. from Hwy. 101
sunnyvale@hamradio.com

NEW CASTLE, DE
(Near Philadelphia)
1509 N. Dupont Hwy., 19720
(302) 322-7092
(800) 644-4476
Jim, KA3LLL, Mgr.
RT.13 1/4 mi., So. I-295
newcastle@hamradio.com

PORTLAND, OR
11705 S.W. Pacific Hwy.
97223
(503) 598-0555
(800) 854-6046
Leon, N7IXX, Mgr.
Tigard-99W exit
from Hwy. 5 & 217
portland@hamradio.com

DENVER, CO
8400 E. Iliff Ave. #9, 80231
(303) 745-7373
(800) 444-9476
Joe, KD0GA, Mgr.
John, N5EHP, Mgr.
denver@hamradio.com

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1939 W. Dunlap Ave., 85021
(602) 242-3515
(800) 444-9476
Gary, N7GJ, Mgr.
1 mi. east of I-17
phoenix@hamradio.com

ATLANTA, GA
6071 Buford Hwy., 30340
(770) 263-0700
(800) 444-7927
Mark, KJ4VO, Mgr.
Doraville, 1 mi. no. of I-285
atlanta@hamradio.com

WOODBIDGE, VA
(Near Washington D.C.)
14803 Build America Dr. 22191
(703) 643-1063
(800) 444-4799
Steve, N4SR, Mgr.
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woodbridge@hamradio.com

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224 N. Broadway, 03079
(603) 898-3750
(800) 444-0047
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sales@hamradio.com
Exit 1, I-93;
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saalem@hamradio.com

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- Backlit Front Key Panel

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- Built-in 1200/9600 Baud TNC
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- DX Packet Cluster Monitor
- 200 Mems., CTCSS
- VC-H1 Messaging Control

Low Pricing!



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- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIRES compatible

Great Price!



FT-857D

- Ultra compact HF, VHF, UHF
- 100w HF/6M, 50w 2M, 20w UHF
- DSP included • 32 color display
- 200 mems • Detachable front panel (YSK-857 required)

Call for Low Price!



FT-1000MP MKV HF Trans.

- Enhanced Digital Signal Processing
- Dual RX
- Collins SSB filter built-in
- 200W, External power supply

Low Pricing!

ICOM



IC-706MKIIG HF/VHF Transceiver

- All mode HF/6M/2M/70CM
- 100W HF/6M, 50W/2M, 20W/440 MHz
- AF-DSP • Plug and Play Filters - No Soldering
- Easy-to-Navigate menus

Low Pricing!



IC-756 PRO II All mode Transceiver

- 160-6M @ 100W • Enhanced Rx performance
- 32 bit IF DSP • SSB/CW Synchronous tuning
- Enhanced 5 inch color TFT w/spectrum scope
- Selectable IF filter shapes for SSB & CW
- Multiple DSP controlled AGC loops
- Advanced CW functions
- 101 alphanumeric memories

The Ultimate Radio!

ALINCO



DJ-196T 2M/HT

- 5 Watt out
- 40 memories
- Alphanumeric display
- CTCSS + DCS built in
- "S" meter
- Auto Dialer

Low Pricing!



DR-135TP 2M mobile

- 50 Watt out • Alpha numeric display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

Low Pricing!



The Ground Plane

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Amateur
Radio
Association
ARRL Member Club
Since 1974



Volume 5 Edition 11

November, 2004

Our next meeting date is: November 12th.

Happy Thanksgiving from



all of us at SBARA

SBARA HOLIDAY POTLUCK DINNER on December 3rd, 2004 at the Veterans Hall

Details in this Issue

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<http://www.qsl.net/sbara>

South Bay Amateur Radio Association — SBARA

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